

February 24, 2022

Co-Chair Norman Needleman
Co-Chair David Arconti
Senator Paul Formica
Representative Charles Ferraro

Energy and Technology Committee:

We are submitting testimony on section 2(f) of S.B. 90, AN ACT CONCERNING CONSULTANT AND PROCUREMENT AUTHORITY FOR THE DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION.

Last year, the Energy Committee took one of the most positive steps possible in lowering heating sector emissions when you approved a bill (H.B. 6412) that passed into law ([PA 21-181](#)) which requires home heating to be replaced over time with advanced biofuels (ie. biodiesel, renewable diesel, etc.) that are approved under the U.S. Environmental Protection Agency (EPA) Renewable Fuel Standard Program (RFS).

PA 21-181 requires that the Comprehensive Energy Strategy (CES) to consider the reductions in greenhouse gas emissions resulting from low-carbon fuel blends used in home heating oil on a lifecycle basis and the contributions to the state's greenhouse gas emissions mandated levels, pursuant to section [22a-200a](#), in connection with the reduction of greenhouse gas emissions on a life-cycle basis.

The public act further requires the CES to consider the ability of a thermal portfolio standard to further reductions in greenhouse gas emissions on a life-cycle basis, and the relative value of the reductions in greenhouse gas emissions on a life-cycle basis achieved by biodiesel and other low-carbon fuel blends used currently in the state.

We request that the committee add language to the bill that requires the Department of Energy and Environmental Protection (DEEP) to hire a consultant who has specific expertise in the **Greenhouse gasses, Regulated Emissions, and Energy use in Technologies Model (GREET)** that was developed by the U.S. Department of Energy's (DOE) Argonne National Laboratory.

The GREET model is a well-established tool to measure life cycle analysis (LCA) which is a required way to evaluate biodiesel emissions by the CES.

For too long, Connecticut has relied on inaccurate “burner-tip” emissions data to measure emissions. While burner-tip emissions are a one part of the LCA, they haven't been used as an emissions measurement exclusively by any national laboratory for years.

Using burner-tip emissions alone provides inaccurate data and causes decisions to be made that could harm efforts to reduce emissions therefore, a LCA approach is necessary if the state wants to be environmentally honest, and DEEP needs to have a consultant with specific knowledge about this approach to accomplish the goals of the Global Warming Solutions Act.

LCA is used to quantify the environmental impacts of products or services. It includes all processes, from “cradle-to-grave” or in the case of heating fuels, “well head to burner tip,” along the supply chain of a product or service.

How LCA is calculated:

- Land management change
- Cultivation and harvest of biomass
- Transportation of feedstock
- Conversion to energy carrier
- Distribution
- Use
- Disposal

Burner-tip emissions only measure the emissions from the use of the product and fail to give a clear picture of the true impact.

LCA is accepted environmental science and is used by:

- National Renewable Energy Laboratory
- Lawrence Berkeley National Laboratory
- Argonne National Laboratory
- U.S. Department of Energy
- U.S. Environmental Protection Agency/Renewable Fuel Standard (RFS)
- California Low Carbon Fuel Standard (LCFS)
- European Union

and dozens of other respected private and public entities.

We ask that the Energy Committee support adding language in section 2(f) of S.B. 90 to require that a consultant who has experience and expertise in the Greenhouse gasses, Regulated Emissions, and Energy use in Technologies Model (GREET).

Respectfully,

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President